

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Claims 28-30 are amended.

Claims 42-44 are new.

Listing of Claims:

1. (Original) A method for disassembling a refrigerator comprising the processes of:
collecting a refrigerant gas and removing a compressor;
cutting/processing and separating a heat-insulating housing including a heat insulator into a plurality of pieces; and
compressing/processing the pieces by compression rollers opposing each other so as to collect a gas contained in the heat insulator.
2. (Original) The method for disassembling a refrigerator according to claim 1, wherein the heat-insulating housing is cut/processed to be at least one of substantially flat, substantially U-shaped and substantially L-shaped pieces.
3. (Original) The method for disassembling a refrigerator according to claim 1, wherein the process of cutting/processing and separating the heat-insulating housing comprises a process of cutting/processing the heat-insulating housing so as to remove a door and a process of slicing the heat-insulating housing into cross sections, each of predetermined thickness.

4. (Original) The method for disassembling a refrigerator according to claim 1, wherein the process of cutting/processing and separating the heat-insulating housing comprises a process of cutting/processing the heat-insulating housing so as to remove a door and a process of cutting/processing and separating the heat-insulating housing into a plurality of substantially flat pieces and at least one substantially L-shaped piece.

5. (Original) The method for disassembling a refrigerator according to claim 1, wherein the process of cutting/processing and separating the heat-insulating housing comprises a process of cutting/processing and separating the heat-insulating housing into pieces of a door, a top plate, a bottom plate, a side plate, a back plate and a partition plate.

6. (Original) The method for disassembling a refrigerator according to claim 1, wherein the process of cutting/processing and separating the heat-insulating housing uses a cutting device comprising

a rotor with a principal plane,

a spindle provided in a normal direction to the principal plane, and

at least one impacting body mounted on the spindle rotatably,

wherein the impacting body is mounted so that a predetermined fitting gap is provided between the impacting body and the spindle and a part of a periphery of the impacting body can be positioned beyond a periphery of the rotor, and

the heat-insulating housing is cut/processed by rotating the rotor at a high speed to allow the impacting body to impact on the heat-insulating housing at least at a critical impact velocity.

7. (Original) The method for disassembling a refrigerator according to claim 6, wherein the impacting body is allowed to impact on the heat-insulating housing at a speed of at least about 139 m/second (about 500 km/hour).
8. (Original) The method for disassembling a refrigerator according to claim 6, wherein the impacting body is allowed to impact on the heat-insulating housing at a speed of at least about 340 m/second (about 1224 km/hour).
9. (Original) The method for disassembling a refrigerator according to claim 6, wherein the impacting body is allowed to impact on the heat-insulating housing at a speed at least twice as high as the critical impact velocity of the heat-insulating housing.
10. (Original) The method for disassembling a refrigerator according to claim 6, wherein the impacting body cuts the heat-insulating housing by impacting on the heat-insulating housing to smash a surface thereof.
11. (Original) The method for disassembling a refrigerator according to claim 1, wherein the process of cutting/processing and separating the heat-insulating housing uses a cutting device comprising at least a first rotating unit and a second rotating unit, each of these rotating units comprising
 - a rotor with a principal plane,
 - a spindle provided in a normal direction to the principal plane, and

at least one impacting body mounted on the spindle rotatably,

wherein the impacting body is mounted so that a predetermined fitting gap is provided between the impacting body and the spindle and a part of a periphery of the impacting body can be positioned beyond a periphery of the rotor, and

the impacting body of the first rotating unit and the impacting body of the second rotating unit are allowed to impact on the heat-insulating housing sequentially while rotating the rotating units in a plane parallel with the principal plane of the rotor at a high speed and holding the first and second rotating units so that a circular path of a tip of the impacting body of the first rotating unit and a circular path of a tip of the impacting body of the second rotating unit during the rotation substantially are on the same plane, a cutting depth by the impacting body of the second rotating unit is made larger than that by the impacting body of the first rotating unit, and the impacting body of at least one of the rotating units is allowed to impact on the heat-insulating housing at least at a critical impact velocity, whereby the heat-insulating housing is cut/processed in a direction substantially parallel with the principal plane of the rotor.

12. (Original) The method for disassembling a refrigerator according to claim 11, wherein the impacting body of the first rotating unit, which impacts on the heat-insulating housing first, is allowed to impact on the heat-insulating housing at least at the critical impact velocity.

13. (Original) The method for disassembling a refrigerator according to claim 11, wherein the rotating units are provided on a common base.

14. (Original) The method for disassembling a refrigerator according to claim 11, wherein the impacting body has a different shape in each of the rotating units.
15. (Original) The method for disassembling a refrigerator according to claim 11, wherein the impacting body of at least one of the rotating units is allowed to impact on the heat-insulating housing at a speed of at least about 139 m/second (about 500 km/hour).
16. (Original) The method for disassembling a refrigerator according to claim 11, wherein the impacting body of at least one of the rotating units is allowed to impact on the heat-insulating housing at a speed of at least about 340 m/second (about 1224 km/hour).
17. (Original) The method for disassembling a refrigerator according to claim 11, wherein the impacting body of at least one of the rotating units is allowed to impact on the heat-insulating housing at a speed at least twice as high as the critical impact velocity of the heat-insulating housing.
18. (Original) The method for disassembling a refrigerator according to claim 11, wherein the impacting body that impacts on the heat-insulating housing at least at the critical impact velocity cuts the heat-insulating housing by impacting on the heat-insulating housing to smash a surface thereof.

19. (Original) The method for disassembling a refrigerator according to claim 11, wherein, when the heat-insulating housing is formed by layering at least a first layer and a second layer that have different critical impact velocities, the first layer is cut mainly by the impacting body of the first rotating unit, the second layer is cut mainly by the impacting body of the second rotating unit, and an impact velocity of the impacting body of the first rotating unit against the heat-insulating housing is made different from that of the impacting body of the second rotating unit against the heat-insulating housing.

20. (Original) The method for disassembling a refrigerator according to claim 11, wherein, when the heat-insulating housing is formed by layering at least a first layer and a second layer that has a critical impact velocity smaller than the first layer, the first layer is cut mainly by the impacting body of the first rotating unit, and the second layer is cut mainly by the impacting body of the second rotating unit.

21. (Original) The method for disassembling a refrigerator according to claim 20, wherein the cutting depth by the impacting body of the first rotating unit is equal to or larger than a thickness of the first layer.

22. (Original) The method for disassembling a refrigerator according to claim 20, wherein the impacting body of the first rotating unit is allowed to impact on the first layer at least at the critical impact velocity of the first layer.

23. (Original) The method for disassembling a refrigerator according to claim 20, wherein the impacting body of the first rotating unit is allowed to impact on the first layer at a speed at least twice as high as the critical impact velocity of the first layer.

24. (Original) The method for disassembling a refrigerator according to claim 20, wherein the impacting body of the first rotating unit is allowed to impact on the first layer at a speed of at least about 139 m/second (about 500 km/hour).

25. (Original) The method for disassembling a refrigerator according to claim 20, wherein the impacting body of the first rotating unit is allowed to impact on the first layer at a speed of at least about 340 m/second (about 1224 km/hour).

26. (Original) The method for disassembling a refrigerator according to claim 20, wherein the impacting body of the second rotating unit is allowed to impact on the second layer at a speed not greater than the critical impact velocity of the first layer.

27. (Original) The method for disassembling a refrigerator according to claim 11, wherein the circular path of the tip of the impacting body of the first rotating unit has a smaller radius than the circular path of the tip of the impacting body of the second rotating unit.

28. (Currently Amended) The method for disassembling a refrigerator according to claim 6 [[or 11]], wherein an outer shape of the impacting body is any one of a polygon

with a plurality of corners, a shape with projections at substantially equal angles on its periphery, a disc shape, a substantially-bell shape, a substantially-"9" shape and a substantially-bow shape.

29. (Currently Amended) The method for disassembling a refrigerator according to claim 6 [[or 11]], wherein the fitting gap between the spindle and the impacting body is at least 2 mm.

30. (Currently Amended) The method for disassembling a refrigerator according to claim 6 [[or 11]], wherein the fitting gap between the spindle and the impacting body is about 5 to 10 mm.

31-41 (Canceled)

42. (New) The method for disassembling a refrigerator according to claim 11, wherein an outer shape of the impacting body is any one of a polygon with a plurality of corners, a shape with projections at substantially equal angles on its periphery, a disc shape, a substantially-bell shape, a substantially-"9" shape and a substantially-bow shape.

43. (New) The method for disassembling a refrigerator according to claim 11, wherein the fitting gap between the spindle and the impacting body is at least 2 mm.

44. (New) The method for disassembling a refrigerator according to claim 11,
wherein the fitting gap between the spindle and the impacting body is about 5 to 10 mm.